

## DECLARATION

As the below-named inventors, we declare that:

Our residences, post office addresses, and citizenships are as stated below under our names.

We believe we are the original, first, and joint inventors of the invention entitled "SYNCHRONIZATION TECHNIQUES IN A MULTITHREADED ENVIRONMENT," which is described and claimed in the foregoing specification and for which a patent is sought.

We have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to herein (if any).

We acknowledge our duty to disclose information of which we are aware which is material to the patentability and examination of this application in accordance with 37 C.F.R. § 1.56(a).

We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that the making of willfully false statements and the like is punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and may jeopardize the validity of any patent issuing from this patent application.

Gail A. Alverson

Gail A. Alverson

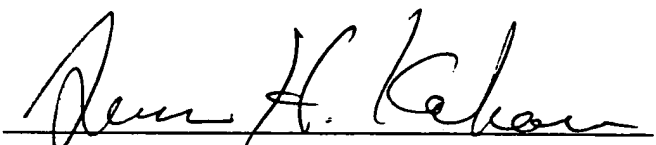
Date 7/19/99

Residence : City of Seattle, County of King  
State of Washington  
Citizenship : United States of America  
P.O. Address : 6827 54th Avenue Northeast  
Seattle, WA 98115



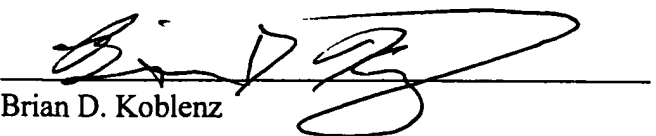
Charles David Callahan, II

Date 7/19/99  
Residence : City of Seattle, County of King  
State of Washington  
Citizenship : United States of America  
P.O. Address : 3003 Northeast 193rd  
Seattle, WA 98155



Simon H. Kahan

Date 7/16/99  
Residence : City of Seattle, County of King  
State of Washington  
Citizenship : Canada  
P.O. Address : 2415 East Roanoke Street  
Seattle, WA 98112



Brian D. Koblenz

Date 7/16/99  
Residence : City of Seattle, County of King  
State of Washington  
Citizenship : United States of America  
P.O. Address : 2644 West Boston Street  
Seattle, WA 98199



Allan Porterfield

Date 7/16/99

Residence : City of Bellevue, County of King  
State of Washington

Citizenship : United States of America

P.O. Address : 10640 Woodhaven Lane  
Bellevue, WA 98004



Burton J. Smith

Date July 16, 1999

Residence : City of Seattle, County of King  
State of Washington

Citizenship : United States of America

P.O. Address : 923 21st Avenue East  
Seattle, WA 98112

## PATENT

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Date

James A.D. White

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Gail A. Alverson et al.  
Application No. : 09/361,671  
Filed : July 27, 1999  
For : SYNCHRONIZATION TECHNIQUES IN A  
MULTITHREADED ENVIRONMENT

Art Unit : 2784  
Docket No. : 324758003US1  
Date : November 17, 1999

Assistant Commissioner for Patents  
Washington, DC 20231

REVOCATION AND SUBSTITUTE POWER OF ATTORNEY

Sir:

In the matter of the above-identified application, I, Kenneth W. Johnson, declare that I am the Vice President – Finance and General Counsel of Tera Computer Company, the assignee of the entire interest. Documentary evidence of chain of title from the original owners to Tera Computer Company has been filed with and recorded by the United States Patent Office at Reel 010139, Frame 0433. The evidentiary documents referred to in the instant Revocation and Substitute Power of Attorney have been reviewed by the undersigned, and it is certified that, to the best of my knowledge and belief, title is in Tera Computer Company. I hereby revoke all power of attorney

heretofore given and appoint JERRY A. RIEDINGER, Registration No. 30,582; MAURICE J. PIRIO, Registration No. 33,273; JOHN C. STEWART, Registration No. 40,108; MICHAEL D. BROADDUS, Registration No. 41,637; BRIAN P. MCQUILLEN, Registration No. 41,989; TARANEH MAGHAME, Registration No. 43,768; CATHERINE HONG TRAN, Registration No. 43,960; ROBERT G. WOOLSTON, Registration No. 37,263; PAUL T. PARKER, Registration No. 38,264; JOHN M. WECHKIN, Registration No. 42,216; BRIAN G. BODINE, Registration No. 40,520; CHRISTOPHER DALEY-WATSON, Registration No. 34,807, STEVEN D. LAWRENZ, Registration No. 37,376; and JAMES A.D. WHITE, Registration No. 43,985, as the principal attorneys with full power of substitution, association, and revocation to prosecute said application, to transact all business in the Patent and Trademark Office connected therewith, and to receive the letters patent therefor. Please direct all future correspondence to:

Patent-SEA  
 Perkins Coie LLP  
 1201 Third Avenue, Suite 4800  
 Seattle, Washington 98101-3099  
 Attn: James A.D. White

and direct all telephone calls to (206) 583-8888 and telecopies to (206) 583-8500.

March 19, 1989  
 Date

Tera Computer Company

Kenneth W. Johnson  
 Vice President - Finance and General Counsel

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Gail A. Alverson, Charles David Callahan, II,  
Simon H. Kahan, Brian D. Koblenz, Allan Porterfield,  
and Burton J. Smith

Filed : Concurrently Herewith

For : SYNCHRONIZATION TECHNIQUES IN A  
MULTITHREADED ENVIRONMENT

Docket No. : 902115.403c1

Box Patent Application  
Assistant Commissioner for Patents  
Washington, DC 20231

ELECTION UNDER 37 C.F.R. §§ 3.71 AND 3.73 AND POWER OF ATTORNEY

The undersigned, being Assignee of the entire interest in the above-identified application by virtue of an Assignment filed concurrently herewith, hereby elects, under 37 C.F.R. § 3.71, to prosecute the application to the exclusion of the inventor.

Assignee hereby appoints RICHARD W. SEED, Reg. No. 16,557; ROBERT J. BAYNHAM, Reg. No. 22,846; EDWARD W. BULCHIS, Reg. No. 26,847; GEORGE C. RONDEAU, JR., Reg. No. 28,893; DAVID H. DEITS, Reg. No. 28,066; WILLIAM O. FERRON, JR., Reg. No. 30,633; PAUL T. MEIKLEJOHN, Reg. No. 26,569; DAVID J. MAKI, Reg. No. 31,392; RICHARD G. SHARKEY, Reg. No. 32,629; DAVID V. CARLSON, Reg. No. 31,153; KARL R. HERMANN, Reg. No. 33,507; DAVID D. MCMASTERS, Reg. No. 33,963; MICHAEL J. DONOHUE, Reg. No. 35,859; CHRISTOPHER J. DALEY-WATSON, Reg. No. 34,807; STEVEN D. LAWRENZ, Reg. No. 37,376; ROBERT G. WOOLSTON, Reg. No. 37,263; ELLEN M. BIERMAN, Reg. No. 38,079; PAUL T. PARKER, Reg. No. 38,264; ANN T. KADLECEK, Reg. No. 39,244; DAVID W. PARKER, Reg. No. 37,414; BRIAN G. BODINE, Reg. No. 40,520; FRANK ABRAMONTE, Reg. No. 38,066; E. RUSSELL TARLETON, Reg. No. 31,800; KEVIN S. COSTANZA, Reg. No. 37,801; DALE C. BARR, Reg. No. 40,498; KEVIN S. ROSS, Reg.

No. 42,116; JOHN M. WECHKIN, Reg. No. 42,216; THOMAS E. LOOP, Reg. No. 42,810; STEPHEN J. ROSENMAN, Reg. No. 43,058; BRIAN L. JOHNSON, Reg. No. 40,033; JAMES D. WHITE, Reg. No. 43,985; KIMTON N. ENG, Reg. No. 43,605; SUSAN D. BETCHER, Reg. No. 43,498; DENNIS M. de GUZMAN, Reg. No. 41,702; JANE E.R. POTTER, Reg. No. 33,332, KEN TARBET, Reg. No. 43,181, and WILLIAM T. CHRISTIANSEN, Reg. No. P-44,614, comprising the firm of SEED AND BERRY LLP, 6300 Columbia Center, Seattle, Washington 98104-7092, as its attorneys to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. Please direct all telephone calls to James A. D. White at (206) 622-4900 and telecopies to (206) 682-6031.


Please direct all communications to:

James A. D. White, Esq.  
Seed and Berry LLP  
6300 Columbia Tower  
701 Fifth Avenue  
Seattle, Washington 98104-7092

Pursuant to 37 C.F.R. § 3.73, the undersigned duly authorized designee of Assignee certifies that the evidentiary documents have been reviewed, specifically the Assignment to Tera Computer Company filed concurrently herewith for recording, a copy of which is attached hereto, and certifies that to the best of my knowledge and belief, title remains in the name of the Assignee.

July 21, 1997  
DATE

Tera Computer Company  
ASSIGNEE

  
Kenneth W. Johnson  
Chief Financial Officer and General Counsel

Enclosure:

Copy of Assignment

## ASSIGNMENT

WHEREAS, we, Gail A. Alverson, Charles David Callahan, II, Simon H. Kahan, Brian D. Koblenz, Allan Porterfield and Burton J. Smith (hereinafter referred to as ASSIGNORS), having post office addresses of 6827 54th Avenue Northeast, Seattle, WA 98115; 3003 Northeast 193rd, Seattle, WA 98155; 2415 East Roanoke Street, Seattle, WA 98112; 2644 West Boston Street, Seattle, WA 98199; 10640 Woodhaven Lane, Bellevue, Washington 98004; and 923 21st Avenue East, Seattle, WA 98112, respectively, are the joint inventors of an invention entitled "SYNCHRONIZATION TECHNIQUES IN A MULTITHREADED ENVIRONMENT," as described and claimed in the specification forming part of an application for United States letters patent executed herewith;

WHEREAS, Tera Computer Company (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at Merrill Place, 411 First Avenue South, Suite 600, Seattle, Washington 98104-2860, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.




Gail A. Alverson  
Gail A. Alverson

State of Washington                    )  
  ) ss.  
County of King                         )

Dated 7/19/99  
Signature of Carol Lynn Schlaff  
Notary Public Carol Lynn Schlaff  
Printed Name Carol Lynn Schlaff  
My appointment expires 11-20-99

7/17/99  
Date

  
Charles David Callahan, II

State of Washington               )  
County of King                     ) ss.

I certify that I know or have satisfactory evidence that Charles David Callahan, II is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated July 19, 1999  
Signature of  
Notary Public Carol Lynn Schlaff  
Printed Name Carol Lynn Schlaff  
My appointment expires 11-20-99

7/16/99  
Date

Simon H. Kahan  
Simon H. Kahan

State of Washington )  
                                  ) ss.  
County of King )

I certify that I know or have satisfactory evidence that Simon H. Kahan is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated 7/16/99  
Signature of Notary Public Carol Lynn Schlaff  
Printed Name Carol Lynn Schlaff  
My appointment expires 11-20-99

7/16/99  
Date

Brian D. Koblenz  
Brian D. Koblenz

State of Washington )  
                                  ) ss.  
County of King )

I certify that I know or have satisfactory evidence that Brian D. Koblenz is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated 7/16/99  
Signature of Notary Public Carol Lynn Schlaff  
Printed Name Carol Lynn Schlaff  
My appointment expires 11/20/99

7/16/99  
Date

Allan Porterfield  
Allan Porterfield

State of Washington )  
                                  ) ss.  
County of King )

I certify that I know or have satisfactory evidence that Allan Porterfield is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated 7/16/99  
Signature of Notary Public Carol Lynn Schlaff  
Printed Name Carol Lynn Schlaff  
My appointment expires 11/20/99

July 16, 1999  
Date

Burton J. Smith  
Burton J. Smith

State of Washington )  
                                  ) ss.  
County of King )

I certify that I know or have satisfactory evidence that Burton J. Smith is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated 7/16/99  
Signature of Notary Public Carol Lynn Schlaff  
Printed Name Carol Lynn Schlaff  
My appointment expires 11/20/99

# STATE of WASHINGTON



## SECRETARY of STATE

**L. RALPH MUNRO**, *Secretary of State of the State of Washington and custodian of its seal.*

hereby certify by this certificate that the attached is a true and correct copy of

ARTICLES OF AMENDMENT

of

**TERA COMPUTER COMPANY**

**CHANGING NAME TO CRAY INC.**

as filed in this office on April 3, 2000.



Date: August 11, 2000

*Given under my hand and the Seal of the State  
of Washington at Olympia, the State Capital*

*L. Ralph Munro, Secretary of State*

## STATE of WASHINGTON



## SECRETARY of STATE

I, RALPH MUNRO, Secretary of State of the State of Washington and custodian of its seal,  
hereby issue this

## CERTIFICATE OF AMENDMENT

TO

TERA COMPUTER COMPANY

a Washington Profit corporation. Articles of Amendment were filed for record in this  
office on the date indicated below.

Changing name to CRAY INC.

UBI Number: 601 058 422

Date: April 03, 2000



Given under my hand and the Seal of the State  
of Washington at Olympia, the State Capital

  
Ralph Munro, Secretary of State  
2-394156-0

ARTICLES OF AMENDMENT  
OF ARTICLES OF INCORPORATION OF  
TERA COMPUTER COMPANY

FILED  
STATE OF WASHINGTON  
APR 03 2000  
RALPH MUNRO  
SECRETARY OF STATE

Articles of Amendment to the Restated Articles of Incorporation of Tera Computer Company, a Washington corporation, are herein executed by said corporation, pursuant to the provisions of RCW 23B.01.200 and RCW 23B.10.060, as follows:

1. The name of the corporation is Tera Computer Company.
2. The amendment to the Restated Articles of Incorporation of this corporation deletes the language of Article I in its entirety and replaces such Article with the following language:

ARTICLE I

Name

The name of the Corporation is Cray Inc.

3. No exchange, reclassification or cancellation of issued shares shall be effected by this amendment.
4. The date of the adoption of said amendment by the Board of Directors of said corporation was February 22, 2000.
5. The amendment to the Restated Articles of Incorporation was duly approved by the Board of Directors in accordance with the provisions of RCW 23B.10.020, and shareholder action was not required.

IN WITNESS WHEREOF, the undersigned has executed these Articles of Amendment in an official and authorized capacity under penalty of perjury this 3<sup>rd</sup> day of April, 2000.

TERA COMPUTER COMPANY

By: 

Kenneth W. Johnson,  
Its Vice President-Finance, Chief  
Financial Officer and Secretary